Sincrubra is nearest to P. cotyora Hew., from which it is very different.

Described from 7 specimens from Cavinas, Bolivia. *Type*—The Academy of Natural Sciences of Philadelphia. Paratypes—Collection Mengel.

EXPLANATION OF PLATE VIII.

Figs. 1-2, Perisama inconspicua Mengel, Bolivia. (Ent. News, xxvii, p. 423, 1916).

Figs. 3-4, Perisama sinerubra Mengel, Bolivia, n. sp.

Fig. 5, Catagramma horstii Mengel, U. S. Colombia. (Ent. News. xxvii, p. 423, 1916).

Preliminary Key to the Nearctic Species of Eupteryx (Homoptera; Eupterygidae).

By W. L. McAtee, Biological Survey, Washington, D. C.

For bibliographic references and history of the genus *Eupteryx* Curtis, see article by the writer on Genera of the Eupterygidae, Proceedings of the Biological Society of Washington, Vol. 31, pp. 109-124, Nov. 29, 1918.

Diagnostic characters in this family: Membrane without appendix; hindwing without submarginal vein, and with three apical cells.

After determining that forewing lacks appendix, the easiest method of recognizing *Eupteryx* is to lift outer apical part of forewing; if the hindwing then exposed has no submarginal vein and the first two sectors are joined by a crossvein, the insect is a *Eupteryx*.

Key to the Species.

AA. Fourth apical cell of forewing 4-sided (second sector does not form part of its outer border, no more than tangent to it, and sometimes separated by a short stalk); coloration otherwise.

B. Forewings white; vertex, thorax and scutellum mostly black.

vanduzei Gillette.

BB. Forewings not white; general color above smoky to blackish sometimes varied with yellow or sanguineous,

flavoscuta Gillette.

Eupteryx melissae Curtis.

Eupteryx melissae Curtis, John. British Entomology being Illustrations and Descriptions of the Genera of Insects found in Great Britain and Ireland, Vol. 14, No. 640 [p. 2], April, 1837 [Niton].

A group of nominal European species which are very closely related includes urticae Fabricius, melissae Curtis, stachydearum Hardy and collina Flor. Characters adequate for distinguishing these species have not as yet been pointed out. Of the four names urticae is the oldest (Fabricius, 1803), and in case all are synonymous, has priority. However, urticae by one character—half of hind tibiae being black—is contrasted with the other three, and may be varietally if not specifically distinct. The next oldest name—melissae Curtis—is, therefore, here adopted. Its synonymy appears to include:

Typhlocyba stachydearum Hardy, James. Descriptions of some new British Homopterous Insects. Transactions of the Tyneside Naturalists' Field Club, 1, 1846-50 (1850), pp. 422-3 [Axwell Park].

Typhlocyba collina Flor, Gustav. Die Rhynchoten Livlands in systematischer Folge beschrieben. 2, 1861, pp. 433-5 [Kudling, Segewold, Kremon].

Eupteryx quinquemaculata, Baker, C. F. New Typhlocybini. Invertebrata Pacifica, Vol. 1, p. 8, Sept. 15, 1903 [Stanford University, California].

Head evenly and fully rounded both laterally and vertically. Length of vertex: interocular width:: 6:10. General color of upper surface of body and of the legs pale yellow; of forewings delicate green fading toward apex; eyes yellowish green. Head with 2 smaller spots on front, 2 larger on transition from front to vertex, and one of about same size on middle of hind margin, black. All of these spots vary from round to V-shaped or quadrangular; hence do not have the importance in distinguishing species assigned to them by European authors. Pronotum with two black spots, just behind median spot on vertex, and one lying just behind and to the side of each of these. Most of disc of pronotum covered by a greenish fuscous cloud, nearly touching the black spots. A dimly visible brown line connects the black spots, and, being a little more conspicuous at the ends, forms a curved brown dash, to the outer side of each of the posterior pair of dots. Scutellum with two pairs of black dots, the anterior larger and more separated.

Forewings with irregular greenish fuscous markings, the color deepest at periphery (like blots the center of which has been sucked up), as follows: One larger and a few smaller on inner anterior angle of

forewing, three larger (the median decidedly so) on main body of clavus and a long narrow one along whole claval suture; between second and third sectors, three, of which the anterior is largest; and one just outside latter on costa. The veins of the apical cells are margined with brown clouds and there are two black spots near exterior border of wing at a point two-thirds of the distance from base.

Long triangular mark on cheeks below insertion of antennae, lower surface of thorax and entire abdomen black, the segments of latter margined posteriorly (sometimes very broadly) with yellow. Last ventral segment yellow, genitalia chiefly yellow in male, mostly black in female. Tarsi and apex of beak black. Length 3-3.25 mm.

Specimens examined: North East, Pennsylvania, Oct. 10, 1912, F. Johnson (U. S. N. M.). Hagerstown, Maryland (U. S. N. M.).

Eupteryx vanduzei Gillette.

Eupteryx vanduzei Gillette, C. P. American Leaf-hoppers of the sub-family Typhlocybinae. Proc. U. S. Nat. Mus. 20, No. 1138, April 20, 1898, pp. 748-9, Figs. 98-100 [Hamburg, New York].

Scutellum and anterior parts black or blackish shading into pale yellow on anterior margin of vertex and upper part of face; lower part of face smoky. Legs, except tarsal claws, and abdomen pale yellow. Both pairs of wings milky white; apical cells of forewings fumose. Length of vertex: interocular width:: 7:13. Length of insect 3.5 mm.

One specimen only, the female type, New York. Type No. 3439, U. S. Nat. Mus.

Prof. Gillette states that this and six other specimens (of the same sex) used by him in original description were collected by E. P. Van Duzee at Hamburg, New York, July 10.

Variations mentioned by Gillette are whitish markings on posterior margin and angles of pronotum, and on apex of scutellum, and dark coloration of tarsal apices and of basal segments of abdominal tergum.

Eupteryx flavoscuta Gillette.

Eupteryx flavoscuta Gillette. Proc. U. S. Nat. Mus. 20, No. 1138, April 20, 1898, pp. 749-50 [Hamburg, New York].

Eupteryx nigra Osborn, Herbert. Jassidae of New York State. 20th Rep. State Entomologist, 1904, in 58th Ann. Rep. N. Y. State Museum, 1904, Vol. 5, Appendix 7, 1906, pp. 543-4 [Jamaica, New York; Columbus, Ohio].

The original account of this species states that the type locality is Hamburg, New York, and that the type is in the U. S. National Museum, No. 3440. There is no specimen in the Museum from Hamburg, N. Y., and that bearing No. 3440 is from Washington, D. C., June 23, 1890. If this is really part of the original material, it is only a paratype; the whereabouts of the holotype is unknown to the writer.

Key to Color Varieties.

A. Thorax with a median and 2 marginal sanguineous vittae,

var. juvenis n. var.

AA. Thorax without sanguineous vittae.

B. Scutellum with broad median yellow vitta.

C. Costa broadly and clavus chiefly yellow...var. clavalis n. var. CC. Costa less broadly yellow; clavus with only a faint spot,

var. flavoscuta Gillette.

BB. Scutellum without yellow vitta.....var. nigra Osborn. Eupteryx flavoscuta var flavoscuta Gillette.

For convenience, description of the typical variety is given first and with it are included the few details of color and proportion that, so far, seem to have specific value.

Smoky brown to blackish above, except anterior margin of vertex, an indistinct spot on clavus, and broad median vitta on scutellum pale yellow. The costal margin of the forewing, except sometimes at middle, is more or less broadly yellow, sometimes overlaid with pruinosity, apex of wing fumose hyaline, clear near margin, first, second and third apical cells with clear spots, that in first the largest. Face, legs and underparts pale yellow, abdominal segments and genitalia more or less margined with brownish. Length of vertex: interorbital width:: 1:2. Length of insect 3.3 mm.

Specimens examined: Greensburg, Pennsylvania, July 24, 1904, M. Wirtner; also same locality, no date (U. S. N. M.).

Eupteryx flavoscuta var. clavalis new variety.

*Unusually wide vittae on scutellum and costal margin and almost whole clavus pale yellow.

Specimen from Uhler Collection, labeled only Sept. 23. Type (U. S. N. M.).

Eupteryx flavoscuta var nigra Osborn.

Scutellum concolorous with general dorsal surface.

Specimens examined: Columbus, Ohio, Sept. 15, 1903. [Paratype kindly loaned by H. Osborn and now in his collec-

tion.] Penn. Sta., Pennsylvania, Sept. 4, 18, 1904, M. Wirtner. [U. S. N. M.]. Patton, Pennsylvania, Sept. 25, 1902, M. Wirtner. [U. S. N. M.]. Orono, Maine, Aug. 31, 1913 [H. Osborn]. Bar Harbor, Maine, Aug. 31, 1913 [H. Osborn]. Washington, D. C., June 23, 1890 [U. S. N. M.]. Difficult Run, Virginia, July 25, 1915, C. P. Alexander [W. L. M.]. Specimens from Uhler Collection, labeled only Sept. 23 [U. S. N. M.].

Eupteryx flavoscuta var juvenis new variety.

General color decidedly lighter than in the other varieties, being grayish smoky; vertex with two sanguineous vittae closely bordering median line; thorax with narrow median vitta and sides behind eyes also sanguineous.

The specimens examined, from Orono and Bar Harbor, Maine, Aug. 31, 1913, kindly loaned by Prof. Herbert Osborn, in whose collection they are, are more or less teneral, leaving the question of fully matured appearance and perhaps of the varietal status of the form in doubt. The type is a male from Bar Harbor.

New Species of Buprestidae (Col.) from the Western United States, with Supplementary notes concerning others.

By Edwin C. Van Dyke, University of California, Berkeley, California.

(Continued from page 156)

Acmaeodera squamosa n. sp.

Form short, cylindrical, hardly depressed, piceous bronzed, clothed on both upper and under surfaces, except the apical ventral of females, with minute white scales which, under high power magnification, are shown to be tuft-like, each elytron with two rows of small elongate reddish yellow spots, the first row on the third interval and the second on the ninth or humeral interval, the discal spots being placed, the first at about the middle, the second midway between that and apex and overlapping laterally on to the fourth and fifth intervals, and the third about equidistant between this last and apex, the lateral spots with the first just posterior to umbone, the second near the middle, and the third and fourth following closely behind. Head coarsely, shallowly and closely punctate, with squamules arising from each puncture,